SEQUENCE LISTING

<110> Salceda, Susana
Recipon, Herve
Cafferkey, Robert
diaDexus, LLC

<120> Method of Diagnosing, Monitoring, Staging, Imaging and Treating Prostate Cancer

<130> DEX-0052

<140>
<141>

<150> 60/104,737
<151> 1998-10-19

<160> 36

<170> PatentIn Ver. 2.0

Ins A1

<210> 1
<211> 188
<212> DNA
<213> Homo sapiens

<400> 1
ggtaaacacc tgcttttatc atcagaacaa agaggctgtg tcccctgccc tatgaggtcc 60
atttctgaga gttgtggcta atgggcaaga aggttggggc tttagagatt tgggataaag 120
atatcaaaca ccagaaaggt agaaagaagt gatcagatta gggttactta ggtgatgata 180
tgaactct 188

<210> 2
<211> 9819
<212> DNA
<213> Homo sapiens

<400> 2
cagctggggt ctacccaggt ccatgtcttg gacatgttga gagtttttct ggaaggcagg 60
gatacagtgt ggtccaaaaa cacacaaatg cccctactgg cccaggggtt gtcacaatag 120
actggaaggg tgacacatcc caggcgcttg ccacccatca cacgcacctc ctacccactg 180
gcatccttcc accccaggca cacacaaagc ctcagtccag agatcaactc tggactcagc 240
tctgaatttg catatcctgt gtgtagattc attcttcata acctctgccc agcctagctt 300
gtgtatcatt tttttttctc tattagggga ggagcccgtc ctggcactcc cattggcctg 360
tagattcacc tcccctgggc agggccccag gacccaggat aatatctgtg cctcctgccc 420
agaaccctcc aagcagacac aatggtaaga atggtgcctg tcctgctgtc tctgctgctg 480
cttctgggtc ctgctgtccc ccaggagaac caagatggtg agtggggaaa gcaagggatg 540

ggtgctggag aggactggaa ggaggtgagg aacaggacat gtggctggga gacaggctgg 600
atgcagctgg gataccctgg catacggcag gaatgggtgc ccaaggctgt caactccctc 660
agctcacaca cttccaggag cattcaggga gcctctgcgc tggcccgaaa taagaccttc 720
aggaatctga atctaaaacc cctagtttac agtgaaaaca aagactccaa agaccaagcg 780
acctgcttgg ggtagacagt caggacggag taggaaccat atgcctggag ctgcttctgc 840
tcctgttcct tccctccttc cgatggctgg gtacacctgc ctgacgctga ggaaaagaga 900
gagcagcccc aaggggaaag tgggaaggca ggttggctgg agggatggtg ctagaaggaa 960
acccgtgccc aaatcccaca ctcagacacc actgcagtgg gtctggaagg cgagtggctg 1020
gaagagaaga gagtgggagc tccgggagat caagagtcac tcctaggata agggaaggag 1080
gctgtttgtg gcatgagaat gtgcaggata aagacatgga agcgaatggc ttctcagttg 1140
tgtgagttta aaattcatga catttacaaa ttgtcagaaa aggtgttata tgtttgttat 1200
ataacaatca ctttggaatg ttaatctgat tctgtgccaa aatctgaatt actcagggtt 1260
ctccagagaa acagaactaa taggtggtac acatatacat atatatgtac gtacacatac 1320
atacatacac tgtatacaca tggatacaca cacacatagg aagagattta catatatgta 1380
tacaaaagag agagagagta gagatttatt ttaagaaatt gactcacact attgggagga 1440
gtaacaagtc ctaaatcttc agagccggcc agcaggctgg agacccaggg aagagttgat 1500
gtcttagtct tgattccaag ggcagactgt aggcagaatt ctttcctctt taggggacat 1560
ctgaggcttt ttctcttaag gccttcaact gattggatga agcccaccac tatggagagt 1620
aatccacttt actcaaggtc tactgatttt tttgtaaatt aaaaaaaaaa ctgtgggtgc 1680
atagtatgtg tatatattta tggggtacat gagaggtttt gattcaggca tgcaatgtga 1740
aataatcaca tcatcaaaaa tgaggtatcc atcccttcaa gcttttatcg tttgtgttac 1800
agacaatcca attatacttt tttggttatt ttagttttta aaagtatttg attatttatt 1860
tatttattta tttttgagac agagtctcac tctgtcaccc aggcaggagt gcagtggcat 1920
gatctcggct cactgcaacc tccgcctccc aggttcaagc aattttcctg cctcagtctc 1980
ctgagtagct aggactacag gcacctgcca ccacacctgg ctaatttttt tgtatttta 2040
gtagagacgg tttcatcatg ttggccaggc tagtcttgat atcctgacct cgtgatctgc 2100
ccgccttggt ctcccaaagt gccgggatta caggtgtcag caactgcgcc tggcctctct 2160
tttggttatt taaaagtgta caattaaatt atgattatta ttattatttt tgagatggat 2220
tcttgttctg tcacccaggc tggagtgcag tggcgtgatc ttggcttact gcaaacctcc 2280
gcctgttggg ttcaagcaat tatcttgcct cgggtgtaca ctgccacaca cggctaactt 2340
atgtattttt aatagagata gggtttcacc atgttggcta gactggtctt gacctcttga 2400
cctcaagtga tccactcact tcagcctccc agagtgctgg aattacaggc acgagccacc 2460
acacctggcc ccagttaaat tattattgac tatagtcacc ctgttgtgct atcaaatagt 2520
aggtcttatt cattcttctt ttttttttct tttttgtgac agagttgccc aggctggaat 2580
gcagtggtgc aatcttggct cactgcaacc tctgcctccc gggcttaagc gattctcctg 2640
cctcagcctt ctgagtcgct gggactacag gtgtgtgcca ccacgcccgg ctaatttatg 2700
tatttttagt agagatgggg tttcaccatg ttggccaggc tggtttcgaa ctcctgacct 2760
caagtgaccc acctgcctca gcttcccaaa gtgttggaat tacaggcatg agccaccaca 2820
cctggcccca gttaaattat tattcactgg agtcactttg ttgtgctatc aaatagtttt 2880
ctaactattt tttttgtacc cattaaccac cctcccaatt tccccccaac cctgccacta 2940
cccttcccag cctttggtaa ccatccttct actctctatg tccatgaatt caattgtagg 3000
gtctactgat ttaaaggcta atcacattta gacactcagg agcaagaata attttagtaa 3060
ttgaactagg attctgccat atgacctcca acatcattag cacctgtgta aattgtatca 3120
taaaataatt atggaactat tatggaaatg tccctctctc ccagatccca ccttgtacca 3180
aaatgcaagg tacaaccccg ggaattctga gctccatcct agtcttaccc tgtgctaatt 3240
cagtctgggt catttcttga attttctggt aaattctcct ttctaccctt tctaactata 3300
tgtatttgtc aggttaagct agaagtgtta attttttttt tttttgagat ggagccttgc 3360
tttgtcacct aggctgaagt gcagtggcat gatctcagct cactgcaagc tccgcctccc 3420

gggttcatgc cattctcctg cctcagcctc ctgagtagct gggactacag gcacccgcca 3480
ccatgcttgg ctaatttttt gaattcttag tagagacggg gtttcaccat gttagccagg 3540
atggtctcga tctcctgacc tcgtgatcca cccgcctcgg ccccctaaag tgctgggatt 3600
acaggcgtga gccactgagc ccggacgaaa tgttaatttg ttttttttga gacggagtct 3660
cactctgtca tccaagctgg agtgcagtgg catgatcttg gcttgttgca acctctgcct 3720
ctctggttca agtgattttc ctgcctcagc ctccagcatg actgggatta caggcccgca 3780
ccaccatgcc cagctaattt ttgtattttt taatagagat ggggtttcac catgttggcc 3840
aggctggtct tcaactcctg atctcaagta atctgcctgc cttggcctcc caaagtcctg 3900
ggattacagg catgagccac ggagcccagc ctagaaatgt taatttctaa cgcatgtcag 3960
attccatgca cactgggcaa ggttccattc ctccatgggg tgactcaggg atccaggcca 4020
attgcatatt gagactcttt catattatcc tgtggccttc aaagtcgtca cctctaggga 4080
tgagaaacaa aagggaaagc cagctggtag ggtcttggac aagaagaaag acatcacttc 4140
tgctcacatt ctcttttgac aaaactcagt cacatggtcc caatatatct tcgaggtggc 4200
tgagtaatgt tatcttccta tgtgtcaagc agaggaaata atgtagtgaa gacacaggat 4260
ggtctctgaa atatcatctc aggcatgaaa gtagagcata ttcacttgag tgagcctcca 4320
gtggtgtgaa gttgatggca ggagaaagag ctggggaaga aaaggccagt ggcaggtctc 4380
ccctcctagc cctatgcagc cccacagtgg gacccttgca tggacctcaa ccatcagaat 4440
cttttctttt gcaggtcgtt actctctgac ctatatctac actgggctgt ccaagcatgt 4500
tgaagacgtc cccgcgtttc aggcccttgg ctcactcaat gacctccagt tctttagata 4560
caacagtaaa gacaggaagt ctcagcccat gggactctgg agacaggtgg aaggaatgga 4620
ggattggaag caggacagcc aacttcagaa ggccagggag gacatcttta tggagaccct 4680
gaaagacatt gtggagtatt acaacgacag taacggtcag tgaataacag accacagggg 4740
tggaaggtct aacccaagag gcagcccccc cagtgtgagt ggcaagggat cagcaggatg 4800
gaaatagtcc caatcccagg ggaagaacag gagacacagc agaaacacag acatgtccgc 4860
atcccaccca ccccacagca caggtgctcc ccgcttcccc atcaattgcc ccatcctcat 4920
cccaggcctc aggtcacaca ggaagtgatg gcagagtcac ttcctatcca ggcacctatg 4980
acctctcacc tccacacccc acccatcgga ggctgatacc cccgtgagaa ggcatcagac 5040
tcacccctgt ccagggaggt tgcctggaga gtgagccact ctcaaagtca ctcagacctg 5100
ggctcacctg gtggttctgc cagtcctagc tgttgacagt gaaacgttcc caaaatatct 5160
ggttgaaatc tgcaaacatt ggagcactga gacctacctc caaacaagtc tgtaatattt 5220
aactatgtct gttctatgaa ggatgtcaca gtctgtcctg atctcccttg cagctccatc 5280
acctagcaca gggtacagcc aatattggct caattgaaat ttgtggaatc cacagagaaa 5340
agcacccggc acacaccgta gcccatgctg ggggctcagg aagtgctgga ttcaaaactg 5400
tgggctgtta gagttccttg gagccctaaa gttcctcctt accatacgat gcagacccag 5460
gaagggccac ctgcgctatg gtcagaggag ctggtggcag agcccgtgca gagatggtcc 5520
ctgtgccccc ggcccagtgc tctttctcct aaaccacact gccagcccca aggcagccaa 5580
cctcaggtct ggtgaactgc tggtgttaaa ttatcataga gtgggtgtca aaagatgggc 5640
tactaagtac aaaaatgccc aaggtgctac atgggatctg aagattttca aaaggaggca 5700
agaaagagat aggcagatgt ttcaaggatg tggggtgggg gaggtcttgg taaggaaaat 5760
ggcccaggct gtgtgtcagc aataggagag gaggggcac aggtgatcag aaaagacact 5820
gggggaagca ttgatggaca ggaatagaaa tggcaaagtg gataattaag aggaaggagg 5880
atgaggagat gaacacaggg tattagaaaa taatagaagg cagggcttgg tggctcactc 5940
ttgtaatccc agcactttgg gaggctgagg caggcagatc acctaaggtc aggagttcga 6000
gaccagcccg gccaacatgg tgaaaccctg tctctactaa taatacaaaa atagcctggc 6060
atggtggcac acgtctgtgg tcccagctac tcaggaggct gaggcaggag aattgcttga 6120
acccaggagg cagaggttac agtggccaaa atcctaccat tgcactacag cctgggtgac 6180
aagagtgaaa cgttgtctaa aaacaaaaaa caaaaaacaa aaaaaggaaa taatagtagc 6240
tgacatttac tgagcactta ctttgtgcca ggcccatcta tgagcatata taatgctcag 6300

aatagccccc taaaacagtg ctcttggcat tgccatttca gaggtgagga aatagaggca 6360
cagggagttg agtggctcca gttcaggcaa cacaccaggt gggggtgggg ggctggggag 6420
agacctggga cgtgagccca gacagcttga gagctttcag agtctatgcc aacagcacca 6480
accagtgctg ggtaaacacc tgcttttatc atcagaacaa agaggctgtg tcccctgccc 6540
tatgaggtcc atttctgaga gttgtggcta atgggcaaga aggttggggc tttagagatt 6600
tgggataaag atatcaaaca ccagaaaggt agaaagaagt gatcagatta gggttactta 6660
ggtgatgata tgaactcttc ctagaactga gagaaaaaga gagccttcct ttactcatat 6720
gaaatcacaa ataatttcta tccaatttgg aagtacactt tggtgtagtt gtgacagctt 6780
cctcaggact cagcataaat tcaaacaaat aattgtcctt agaagagatg ctatagaaga 6840
gatagaaata tattcatatt ctgtagcttt ttttttttg agatggagtt ttgctcttgt 6900
cacccaagct ggagtgcagt gatgcaatct cagctcactg caaactttgc ctcctgggtt 6960
caagggattc tcctgcctca gcctcccgat aactgggact acaggctaca ggcatgtgtc 7020
actactcctg gttaattttt tttttttttt tttaagactg agtcttgctc tgtctttcag 7080
gctgatgtac aatggctcca tctcggctca ctacaacttc tgtcccccag gttcaagcga 7140
ttctcctgcc tcagcctcat gagtagctgg gattacaggc atgtgccagc acacccagca 7200
aatttttgta ttttagtag agatgaggtc ttaccatgtt ggccaggctg gtctcaaact 7260
cctgacctca ggtgatcctt tggcctcagc ctccctaact gctgggatta caggcatgag 7320
ccactgcgtc cagcctaatt ttatattttt ggtagagatg gggtttcacc atattggcca 7380
ggctggtctc gaactcatga cctaaggtga tccatcctcc tcagcctctc aaagtgctgg 7440
gattacaagt gtgagccact gggcctggtg cttttttttt tttttttttt tttttttttt 7500
tgagataggg tctcactctg tcacccaggc tgaaatgcag tagtgtgatt ttggctcatt 7560
gcagccttga cttcccaggc tgaagtgatc ctcccacctc agcctcctga gtagctgggg 7620
ctacaggcat gcaccaccat gctgcgctaa tttttatatt ttttgtagtg gtgggatttc 7680
gccatatcac cctggctggt ctggaacccc tgggctcaag cgatccactc gcttcagctt 7740
ctcaaagtgc tgggattaca ggcatgagcc acagcgccca ggctgtagct ctcttaagga 7800
ggaacatatc tcatctgaga caaacctgaa atgccaaacc aaactgagtt agccctctc 7860
tgtctgttgt atatattgga gtaataacct atttgtcttg ataaagggat tgcatgcttg 7920
aattgcaaaa acctttattt cttttgggtt gcccaatgtg caagactaag agttattttg 7980
ataaatttct caccaggctg actgtctctc tgtggggtcg ggggagtttt cagggtctca 8040
cgtattgcag ggaaggtttg gttgtgagat cgagaataac agaagcagcg gagcattctg 8100
gaaatattac tatgatggaa aggactacat tgaattcaac aaagaaatcc cagcctgggt 8160
ccccttcgac ccagcagccc agataaccaa gcagaagtgg gaggcagaac cagtctacgt 8220
gcagcgggcc aaggcttacc tggaggagga gtgccctgcg actctgcgga aatacctgaa 8280
atacagcaaa aatatcctgg accggcaagg tactcactgc ttcctgctcc ccagtactga 8340
gcccagaata aaagacgatc tcaggctagg agctcaggca acatcttagt ccggtctcat 8400
ctgttcctgg atgtccctca gacccccagc tttcatcttt taggatttat tccttccctg 8460
ggataatata atttgtggtc caaaaagaac atcatcaaaa tttcaggcag aatgggccag 8520
gaaggccatt ctttcttgat gagtgtcccc aaatcatctc caattaacag acaaggagct 8580
tgaggttagg gaggtgaggg taacactgtc tgtaagaggc agagctggga ctcaaattcc 8640
agatttcaga ttccaaatcc catcgttttt tatctctaca atgatgcctc ccatctgggt 8700
ggtggagaga agggaggcgt gtaaaagtca gccccagaag gacaagagca agccagtgtg 8760
agcggaattg atggctgcaa gctgagactt ggattggaga cgtagtgaga ctcaggattg 8820
tgcagtgctg cagggaagtg gttgctggat agaggcatgg gctgaaccaa gcagctggac 8880
tgagactggg ggacagaact ccaaagccca ctgagatgtg ggaaaacatg gagaagcaca 8940
cggagcattc acaacttatt gccgtcagag tcaatacatg ggtgaggtgg ggattgggca 9000
agagggaaag cgtcagcctt ccctgatatt ctggaaagtc tcccggggct gggggtgggc 9060
aggtacagag cttcgagctc tgctgatcgc tgacatccag gggtgggggt aggaagagac 9120
ctgggccggg agaagtccac ctcaagcctg cagtgtcaca ctctatccct ccacagatcc 9180

tccctctgtg gtggtcacca gccaccaggc cccaggagaa aagaagaaac tgaagtgcct 9240
ggcctacgac ttctacccag ggaaaattga tgtgcactgg actcgggccg gcgaggtgca 9300
ggagcctgag ttacggggag atgttcttca caatggaaat ggcacttacc agtcctgggt 9360
ggtggtggca gtgcccccgc aggacacagc cccctactcc tgccacgtgc agcacagcag 9420
cctggcccag cccctcgtgg tgccctggga ggccagctag gaagcaaggg ttggaggcaa 9480
tgtgggatct cagacccagt agctgccctt cctgcctgat gtgggagctg aaccacagaa 9540
atcacagtca atggatccac aaggcctgag gagcagtgtg gggggacaga caggaggtgg 9600
atttggagac cgaagactgg gatgcctgtc ttgagtagac ttggacccaa aaaatcatct 9660
caccttgagc ccacccccac cccattgtct aatctgtaga agctaataaa taatcatccc 9720
tccttgccta gcataacaga gaatcctttt tttaacggtg atgcgctgta gaaatgtgac 9780
tagattttct cattggttct gccctcaagc actgaattc 9819

<210> 3
<211> 250
<212> DNA
<213> Homo sapiens

<400> 3
cgcccctgcg ccgccgagcc agctgccaga atgccgaact ggggaggagg caagaaatgt 60
ggggtgtgtc agaagacggt ttactttgcc gaagaggttc agtgcgaagg caacagcttc 120
cataaatcct gcttcctgtg catggtctgc aagaagaatc tggacagtac cactgtggcc 180
gtgcatggtg aggagattta ctgcaagtcc tgctacggca agaagtatgg gcccaaaggc 240
tatggctacg 250

<210> 4
<211> 1900
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (16)

<220>
<221> unsure
<222> (18)

<220>
<221> unsure
<222> (20)

<220>
<221> unsure
<222> (1887)

<220>
<221> unsure
<222> (1894)

<400> 4
acgccttccg cggagnanan caaaacggcg cgcaggccgg gcgcacccag ccgccacttc 60
cgagagcgcc tgccgcccct ggcgccgccg agccagctgc cagaatgccg aactggggag 120
gaggcaagaa atgtggggtg tgtcaagaag acggtttact ttgccgaaga ggttcagtgc 180
gaaggcaaca gcttccataa atcctgcttc ctgtgcatgg tctgcaagaa gaatctggac 240
agtaccactg tgggccgtgc atggtgagga gatttactgg caagtccctg ctacggcaag 300
aagtatgggc ccaaaggcta tggctacggg ccagggcgca ggcaccctca gcactgacaa 360
gggggagtcg ctgggtatca agcacgagga agcccctggg ccacaggccc accaccaacc 420
ccaatggcat ccaaatttgc ccagaagatt ggtggctccg agcgctgccc ccgatgcagc 480
caggcagtct atgctgcgga gaaggtgatt ggtgctggga agtcctggca taaggcctgc 540
tttcgatgtg ccaagtgtgg caaaggcctt gagtcaacca ccctgggcag acaaggatgg 600
cgagatttac tgcaaaggat gttatgctaa aaacttcggg cccaagggct ttggttttgg 660
gcaaggagct ggggccttgg tccactctga gtgaggccac catcacccac cacaccctgc 720
ccactcctgc gcttttcatc gccattccat tcccagcagc tttggagacc tccaggatta 780
tttctctgtc agccctgcca catatcacta atgacttgaa cttgggcatc tggctccctt 840
tggtttgggg gtctgcctga ggtcccaccc cactaaaggg ctccccaggc ctgggatctg 900
acaccatcac cagtaggaga cctcagtgtt ttgggtctag gtgagagcag gcccctctcc 960
ccacacctcg ccccacagag ctctgttctt agcctcctgt gctgcgtgtc catcatcagc 1020
tgaccaagac acctgaggac acatcttggc acccagagga gcagcagcaa caggctggag 1080
ggagagggaa gcaagaccaa gatgaggagg ggggaaggct gggtttttg gatctcagag 1140
attctcctct gtgggaaaga ggttgagctt cctggtgtcc ctcagagtaa gcctgaggag 1200
tcccagctta gggagttcac tattggaggc agagaggcat gcaggcaggg tcctaggagc 1260
ccctgcttct ccaggcctct tgcctttgag tctttgtgga atggatagcc tcccactagg 1320
actgggagga gaataaccca ggtcttaagg accccaaagt caggatgttg tttgatcttc 1380
tcaaacatct agttccctgc ttgatgggag gatcctaatg aaatacctga aacatatatt 1440
ggcatttatc aatggctcaa atcttcattt atctctggcc ttaaccctgg ctcctgaggc 1500
tgcggccagc agagcccagg ccagggctct gttcttgcca cacctgcttg atcctcagat 1560
gtggagggag gtaggcactg cctcagtctt catccaaaca ccttttcctt tgccctgaga 1620
cctcagaatc ttccctttaa cccaagaccc tgcctcttcc actccaccct tctccaggga 1680
cccttagatc acatcactcc acccctgcca ggccccaggt taggaatagt ggtgggagga 1740
aggggaaagg gctgggcctc accgctccca gcaactgaaa ggacaacact atctggagcc 1800
acccactgaa agggctgcag gcatgggctg tacccaagct gatttctcat ctggtcaata 1860
aagctgttta gaccagaaaa aaaaaanaaa aaanaaaagg 1900

<210> 5
<211> 273
<212> DNA
<213> Homo sapiens

<400> 5
gatgcatcaa aagagctgca agttctccac attgacttct tgaatcagga caacgccgtt 60
tctcaccaca catgggagtt ccaaacgagc agtcctgtgt tccggcgagg acaggtgttt 120
cacctgcggc tggtgctgaa ccagccccta caatcctacc accaactgaa actggaattc 180
agcacagggc cgaatcctag catcgccaaa cacaccctgg tggtgctcga cccgaggacg 240
ccctcagacc actacaactg gcaggcaacc ctt 273

<210> 6

<211> 3021
<212> DNA
<213> Homo sapiens

<400> 6
tgtggaagca ccaggcatca gagatagagt cttccctggc attgcaggag agaatctgaa 60
gggatgatgg atgcatcaaa agagctgcaa gttctccaca ttgacttctt gaatcaggac 120
aacgccgttt ctcaccacac atgggagttc caaacgagca gtcctgtgtt ccggcgagga 180
caggtgtttc acctgcggct ggtgctgaac cagcccctac aatcctacca ccaactgaaa 240
ctggaattca gcacagggcc gaatcctagc atcgccaaac acaccctggt ggtgctcgac 300
ccgaggacgc cctcagacca ctacaactgg caggcaaccc ttcaaaatga gtctggcaaa 360
gaggtcacag tggctgtcac cagttccccc aatgccatcc tgggcaagta ccaactaaac 420
gtgaaaactg gaaaccacat ccttaagtct gaagaaaaca tcctatacct tctcttcaac 480
ccatggtgta aagaggacat ggttttcatg cctgatgagg acgagcgcaa agagtacatc 540
ctcaatgaca cgggctgcca ttacgtgggg gctgccagaa gtatcaaatg caaaccctgg 600
aactttggtc agtttgagaa aaatgtcctg gactgctgca tttccctgct gactgagagc 660
tccctcaagc ccacagatag gagggacccc gtgctggtgt gcagggccat gtgtgctatg 720
atgagctttg agaaaggcca gggcgtgctc attgggaatt ggactgggga ctatgaaggt 780
ggcacagccc catacaagtg gacaggcagt gccccgatcc tgcagcagta ctacaacacg 840
aagcaggctg tgtgctttgg ccagtgctgg gtgtttgctg ggatcctgac tacagtgctg 900
agagcgttgg gcatcccagc acgcagtgtg acaggcttcg attcagctca cgacacagaa 960
aggaacctca cggtggacac ctatgtgaat gagaatggca agaaaatcac cagtatgacc 1020
cacgactctg tctggaattt ccatgtgtgg acggatgcct ggatgaagcg accggatctg 1080
cccaagggct acgacggctg gcaggctgtg gacgcaacgc cgcaggagcg aagccagggt 1140
gtcttctgct gtgggccatc accactgacc gccatccgca aaggtgacat ctttattgtc 1200
tatgacacca gattcgtctt ctcagaagtg aatggtgaca ggctcatctg gttggtgaag 1260
atggtgaatg ggcaggagga gttacacgta atttcaatgg agaccacaag catcgggaaa 1320
aacatcagca ccaaggcagt gggccaagac aggcggagag atatcaccta tgagtacaag 1380
tatccagaag gctcctctga ggagaggcag gttcatggat catgccttcc tccttctcag 1440
ttctgagagg gagcacagac gacctgtaaa agagaacttt cttcacatgt cggtacaatc 1500
agatgatgtg ctgctgggaa actctgttaa tttcaccgtg attcttaaaa ggaagaccgc 1560
tgccctacag aatgtcaaca tcttgggctc ctttgaacta cagttgtaca ctggcaagaa 1620
gatggcaaaa ctgtgtgacc tcaataagac ctcgcagatc caaggtcaag tatcagaagt 1680
gactctgacc ttggactcca agacctacat caacagcctg gctatattag atgatgagcc 1740
agttatcaga ggtttcatca ttgcggaaat tgtggagtct aaggaaatca tggcctctga 1800
agtattcacg tctttccagt accctgagtt ctctatagag ttgcctaaca caggcagaat 1860
tggccagcta cttgtctgca attgtatctt caagaatacc ctggccatcc ccttgactga 1920
cgtcaagttc tctttggaaa gcctgggcat ctcctcacta cagacctctg accatgggtg 1980
agtctgcctg aggacggtgc agcctggtga gaccatccaa tcccaaataa aatgcacccc 2040
aataaaaatg gacccaagaa atttatcgtc aagttaagtt ccaaacaagt gaaagagatt 2100
aatgctcaga agattgttct catcaccaag tagccttgtc tgatgctgtg gagccttagt 2160
tgagatttca gcatttccta ccttgtggct tagctttcag attatggatg attaaatttg 2220
atgacttata tgagggcaga ttcaagagcc agcaggtcaa aaaggccaac acaaccataa 2280
gcagccagac ccacaaggcc aggtcctgtg ctatcacagg gtcaccttct tttacagtta 2340
gaaacaccag ccgaggccac agaatcccat ccctttcctg agtcatggcc tcaaaaatca 2400
gggccaccat tgtctcaatt caaatccata gatttcgaag ccacagattc tctccctgga 2460
gcaagcatga ctatgggcag cccagtgctg ccacctgctg acgacccttg agaagctgcc 2520
atatcttcag gccatgggtt caccagccct gaaggcacct gtcaactgga gtgctctctc 2580

agcactggga tgggcctgat agaagtgcat tctcctccta ttgcctccat tctcctctct 2640
ctatccctga aatccaggaa gtccctctcc tggtgctcca agcagtttga agcccaatct 2700
gcaaggacat ttctcaaggg ccatgtggtt ttgcagacaa ccctgtcctc aggcctgaac 2760
tcaccataga gacccatgtc agcaaacggt gaccagcaaa tcctcttccc ttattctaaa 2820
gctgcccctt gggagactcc agggagaagg cattgcttcc tccctggtgt gaactctttc 2880
tttggtattc catccactat cctggcaact caaggctgct tctgttaact gaagcctgct 2940
ccttcttgtt ctgccctcca gagatttgct caaatgatca ataagcttta aattaaactc 3000
tacttcaaga aaaaaaaacc g 3021

<210> 7
<211> 267
<212> DNA
<213> Homo sapiens

<400> 7
gaacattcca gatacctatc attactcgat gctgttgata acagcaagat ggctttgaac 60
tcagggtcac caccagctat tggaccttac tatgaaaacc atggatacca accggaaaac 120
ccctatcccg cacagcccac tgtggtcccc actgtctacg aggtgcatcc ggctcagtac 180
tacccgtccc ccgtgcccca gtacgccccg agggtcctga cgcaggcttc caaccccgtc 240
gtctgcacgc agcccaaatc cccatcc 267

<210> 8
<211> 3443
<212> DNA
<213> Homo sapiens

<400> 8
gggcgggccg ggccgagtag gcgcgagcta agcaggaggc ggaggcggag gcggagggcg 60
aggggcgggg agcgccgcct ggagcgcggc aggtcatatt gaacattcca gatacctatc 120
attactcgat gctgttgata acagcaagat ggctttgaac tcagggtcac caccagctat 180
tggaccttac tatgaaaacc atggatacca accggaaaac ccctatcccg cacagcccac 240
tgtggtcccc actgtctacg aggtgcatcc ggctcagtac tacccgtccc ccgtgcccca 300
gtacgccccg agggtcctga cgcaggcttc caaccccgtc gtctgcacgc agcccaaatc 360
cccatccggg acagtgtgca cctcaaagac taagaaagca ctgtgcatca ccttgaccct 420
ggggaccttc ctcgtgggag ctgcgctggc cgctggccta ctctggaagt tcatgggcag 480
caagtgctcc aactctggga tagagtgcga ctcctcaggt acctgcatca acccctctaa 540
ctggtgtgat ggcgtgtcac actgccccgg cggggaggac gagaatcggt gtgttcgcct 600
ctacggacca aacttcatcc ttcaggtgta ctcatctcag aggaagtcct ggcaccctgt 660
gtgccaagac gactggaacg agaactacgg gcgggcggcc tgcagggaca tgggctataa 720
gaataatttt tactctagcc aaggaatagt ggatgacagc ggatccacca gctttatgaa 780
actgaacaca agtgccggca atgtcgatat ctataaaaaa ctgtaccaca gtgatgcctg 840
ttcttcaaaa gcagtggttt ctttacgctg tatagcctgc ggggtcaact tgaactcaag 900
ccgccagagc aggatcgtgg gcggcgagag cgcgctcccg ggggcctggc cctgggcagg 960
tcagcctgca cgtccagaac gtccacgtgt gcggaggctc catcatcacc cccgagtgga 1020
tcgtgacagc cgcccactgc gtggaaaaac ctcttaacaa tccatggcat tggacggcat 1080
ttgcggggat tttgagacaa tctttcatgt tctatggagc cggataccaa gtagaaaaag 1140
tgatttctca tccaaattat gactccaaga ccaagaacaa tgacattgcg ctgatgaagc 1200
tgcagaagcc tctgactttc aacgacctag tgaaaccagt gtgtctgccc aacccaggca 1260

tgatgctgca gccagaacag ctctgctgga tttccgggtg gggggccacc gaggagaaag 1320
ggaagacctc agaagtgctg aacgctgcca aggtgcttct cattgagaca cagagatgca 1380
acagcagata tgtctatgac aacctgatca caccagccat gatctgtgcc ggcttcctgc 1440
aggggaacgt cgattcttgc cagggtgaca gtggagggcc tctggtcact tcgaagaaca 1500
atatctggtg gctgataggg gatacaagct ggggttctgg ctgtgccaaa gcttacagac 1560
caggagtgta cgggaatgtg atggtattca cggactggat ttatcgacaa atgagggcag 1620
acggctaatc cacatggtct tcgtccttga cgtcgtttta caagaaaaca atggggctgg 1680
ttttgcttcc ccgtgcatga tttactctta gagatgattc agaggtcact tcatttttat 1740
taaacagtga acttgtctgg ctttggcact ctctgccatt ctgtgcaggc tgcagtggct 1800
cccctgccca gcctgctctc cctaacccct tgtccgcaag gggtgatggc cggctggttg 1860
tgggcactgg cggtcaagtg tggaggagag gggtggaggc tgccccattg agatcttcct 1920
gctgagtcct ttccaggggc caattttgga tgagcatgga gctgtcacct ctcagctgct 1980
ggatgacttg agatgaaaaa ggagagacat ggaaagggag acagccaggt ggcacctgca 2040
gcggctgcct ctggggccac ttggtagtgt ccccagccta cctctccaca aggggatttt 2100
gctgatgggt tcttagagcc ttagcagccc tggatggtgg ccagaaataa agggaccagc 2160
ccttcatggg tggtgacgtg gtagtcacct tgtaagggga acagaaacat ttttgttctt 2220
atggggtgag aatatagaca gtgcccttgg gtgcgaggga agcaattgaa aaggaacttg 2280
ccctgagcac tcctggtgca ggtctccacc tgcacattgg gtggggctcc tgggagggag 2340
actcagcctt cctcctcatc ctccctgacc ctgctcctag caccctggag agtgcacatg 2400
ccccttggtc ctgggcaggg gcgccaagtc tggcaccatg ttggcctctt caggcctgct 2460
agtcactgga aattgaggtc catgggggaa atcaaggatg ctcagtttaa ggtacactgt 2520
ttccatgtta tgtttctaca cattgctacc tcagtgctcc tggaaactta gcttttgatg 2580
tctccaagta gtccaccttc atttaactct ttgaaactgt atcatctttg ccaagtaaga 2640
gtggtggcct atttcagctg ctttgacaaa atgactggct cctgacttaa cgttctataa 2700
atgaatgtgc tgaagcaaag tgcccatggt ggcggcgaag aagagaaaga tgtgttttgt 2760
tttggactct ctgtggtccc ttccaatgct gtgggtttcc aaccagggga agggtccctt 2820
ttgcattgcc aagtgccata accatgagca ctactctacc atggttctgc ctcctggcca 2880
agcaggctgg tttgcaagaa tgaaatgaat gattctacag ctaggactta accttgaaat 2940
ggaaagtctt gcaatcccat ttgcaggatc cgtctgtgca catgcctctg tagagagcag 3000
cattcccagg gaccttggaa acagttggca ctgtaaggtg cttgctcccc aagacacatc 3060
ctaaaaggtg ttgtaatggt gaaaacgtct tccttcttta ttgccccttc ttatttatgt 3120
gaacaactgt ttgtcttttt ttgtatcttt tttaaactgt aaagttcaat tgtgaaaatg 3180
aatatcatgc aaataaatta tgcgattttt ttttcaaagt aaccactgca tctttgaagt 3240
tctgcctggt gagtaggacc agcctccatt tccttataag ggggtgatgt tgaggctgct 3300
ggtcagagga ccaaaggtga ggcaaggcca gacttggtgc tcctgtggtt ggtgccctca 3360
gttcctgcag cctgtcctgt tggagaggtc cctcaaatga ctccttctta ttattctatt 3420
agtctgtttc catgggcgtg ata 3443

<210> 9
<211> 254
<212> DNA
<213> Homo sapiens

<400> 9
gtgctgcacc aggccaccat cctgcccaag actgggacag tgtccctgga ggtacggctc 60
ctggaggcct cccgtgcctt cgaggtgtca gagaacggca acctggtagt gagtgggaag 120
gtgtaccagt gggatgaccc tgaccccagg ctcttcgacc acccggaaag ccccaccccc 180
aaccccacgg agcccctctt cctggcccag gctgaagttt acaaggagct gcgtctgcgt 240

ggctacgact acgg 254

<210> 10
<211> 8470
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (4131)

<220>
<221> unsure
<222> (5117)

<220>
<221> unsure
<222> (5552)

<400> 10
cggccgtcga cacggcagcg gccccggcct ccctctccgc cgcgcttcag cctcccgctc 60
cgccgcgctc cagcctcgct ctccgccgcc cgcaccgccg cccgcgccct caccagagca 120
gccatggagg aggtggtgat tgccggcatg tccgggaagc tgccagagtc ggagaacttg 180
caggagttct gggacaacct catcggcggt gtggacatgg tcacggacga tgaccgtcgc 240
tggaaggcgg ggctctacgg cctgccccgg cggtccggca agctgaagga cctgtctagg 300
tttgatgcct ccttcttcgg agtccacccc aagcaggcac acacgatgga ccctcagctg 360
cggctgctgc tggaagtcac ctatgaagcc atcgtggacg gaggcatcaa cccagattca 420
ctccgaggaa cacacactgg cgtctgggtg ggcgtgagcg gctctgagac ctcggaggcc 480
ctgagccgag accccgagac actcgtgggc tacagcatgg tgggctgcca gcgagcgatg 540
atggccaacc ggctctcctt cttcttcgac ttcagagggc ccagcatcgc actggacaca 600
gcctgctcct ccagcctgat ggccctgcag aacgcctacc aggccatcca cagcgggcag 660
tgccctgccg ccatcgtggg gggcatcaat gtcctgctga agcccaacac ctccgtgcag 720
ttcttgaggc tggggatgct cagccccgag ggcacctgca aggccttcga cacagcgggg 780
aatgggtact gccgctcgga gggtgtggtg gccgtcctgc tgaccaagaa gtccctggcc 840
cggcgggtgt acgccaccat cctgaacgcc ggcaccaata cagatggctt caaggagcaa 900
ggcgtgacct tcccctcagg ggatatccag gagcagctca tccgctcgtt gtaccagtcg 960
gccggagtgg cccctgagtc atttgaatac atcgaagccc acggcacagg caccaaggtg 1020
ggcgaccccc aggagctgaa tggcatcacc cgagccctgt gcgccacccg ccaggagccg 1080
ctgctcatcg gctccaccaa gtccaacatg gggcacccgg agccagcctc ggggctggca 1140
gccctggcca aggtgctgct gtccctggag cacgggctct gggcccccaa cctgcacttc 1200
catagcccca accctgagat cccagcgctg ttggatgggc ggctgcaggt ggtggaccag 1260
cccctgcccg tccgtggcgg caacgtgggc atcaactcct ttggcttcgg gggctccaaa 1320
cgtgcacatc atcctgaggc ccaacacgca gccgcccccc gcacccggcc cacatgccac 1380
cctgccccgt ctgctgcggg ccagcggacg cacccctgag gccgtgcaga agctgctgga 1440
gcagggcctc cggcacagcc agggcctggc tttcctgagc atgtgaacga catcgcggct 1500
gtccccgacc accgccatgc ccttccgtgg ctacgctgtg ctgggtggtg agacgcggtg 1560
gcccagaggt gcagcaggtg cccgctggcg agcgcccgct ctggttcatc tgctctggga 1620
tgggcacaca gtggcgcggg atggggctga gcctcatgcg cctggaccgc ttccgagatt 1680

ccatcctacg ctccgatgag gctgtgaacc gattcggcct gaaggtgtca cagctgctgc 1740
tgagcacaga cgagagcacc tttgatgaca tcgtccattc gtttgtgagc ctgactgcca 1800
tccagatagg cctcatagac ctgctgagct gcatggggct gaggccagat ggcatcgtcg 1860
gccactccct gggggaggtg gcctgtggct acgccgacgg ctgcctgtcc caggaggagg 1920
ccgtcctcgc tgcctactgg aggggacagt gcatcaaaga agcccatctc ccgccgggcg 1980
ccatggcagc cgtgggcttg tcctgggagg agtgtaaaca gcgctgcccc ccggcggtgg 2040
tgcccgccgc cacaactcca aggacacagt caccatctcg ggacctcagg ccccggtgtt 2100
tgagttcgtg gagcagctga ggaaggaggg tgtgtttgcc aaggaggtgc ggaccggcgg 2160
tatggccttc cactcctact tcatggaggc catcgcaccc ccactgctgc aggagctcaa 2220
gaaggtgatc cgggagccga agccacgttc agcccgctgg ctcagcacct ctatccccga 2280
ggcccagtgg cacagcagcc tggcacgcac gtcctccgcc gagtacaatg tcaacaacct 2340
ggtgagccct gtgctgttcc aggaggccct gtggcacgtg cctgagcacg cggtggtgct 2400
ggagatcgcg ccccacgccc tgctgcaggc tgtcctgaag cgtggcctga agccgagctg 2460
caccatcatc cccctgatga agaaggatca cagggacaac ctggagttct tcctggccgg 2520
catcggcagg ctgcacctct caggcatcga cgccaacccc aatgccttgt tcccacctgt 2580
ggagtcccca gctccccgag gaactccctc catctcccca ctcatcaagt gggaccacag 2640
cctggcctgg gacgcgccgg ccgccgagga cttccccaac ggttcaggtt ccccctcagc 2700
caccatctac acatgcacac caagctccga gtctcctgac cgctacctgg tggaccacac 2760
catcgacggt cgcgtcctct tccccgccac tggctacctg agcatagtgt ggaagacgct 2820
ggcccgaccc ctgggcctgg gcgtcgagca gctgcctgtg gtgtttgagg atgtggtgct 2880
gcaccaggcc accatcctgc ccaagactgg gacagtgtcc ctggaggtac ggctcctgga 2940
ggcctcccgt gccttcgagg tgtcagagaa cggcaacctg gtagtgagtg ggaaggtgta 3000
ccagtgggat gaccctgacc ccaggctctt cgaccacccg gaaagcccca cccccaaccc 3060
cacggagccc ctcttcctgg cccaggctga agtttacaag gagctgcgtc tgcgtggcta 3120
cgactacggc cctcatttcc agggcatcct ggaggccagc ctggaaggtg actcggggag 3180
gctgctgtgg aaggataatg ggtgagttca tggacaccat gctgcagatg tccatcctgg 3240
gtcggccaag cacggcctgt acctgcccac ccgtgtcacc gccatccaca tcgaccctgc 3300
cacccacagg cagaagctgt acacactgca ggacaaggcc caagtggctg acgtggtggt 3360
gagcaggtgg ctgagggtca cagtggccgg aggcgtccac atctccgggc tccacactga 3420
gtcggccccg cggcggcagc aggagcagca ggtgcccatc ctggagaagt tttgcttcac 3480
tccccacacg gaggaggggt gcctgtctga gcacgctgcc ctcgaggagg agctgcaact 3540
gtgcaagggg ctggtcgagg cactcgagac caaggtgacc cagcaggggc tgaagatggt 3600
ggtgcccgga ctggatgggg cccagatccc cccgggaccc ctcacagcag gaactgcccc 3660
ggctgttgtc ggctgcctgc aggcttcagc tcaacgggaa cctgcagctg gagctggcgc 3720
aggtgctggc ccaggagagg cccaagctgc cagaggaccc tctgctcagc ggcctcctgg 3780
actccccggc actcaaggcc tgcctggaca ctgccgtgga gaacatgccc agcctgaaga 3840
tgaaggtggt ggaggtgctg gccggccacg gtcacctgta ttcccgcatc ccaggcctgc 3900
tcagccccca tcccctgctg cagctgagct acacggccac cgaccgccac ccccaggccc 3960
tggaggctgc ccaggccgag ctgcagcagc acgacgttgc ccagggccag tgggatcccg 4020
cagaccctgc ccccagcgcc ctgggcagcg cggacctcct ggtgtgcaac tgtgctgtgg 4080
ctgccctcgg ggacccgcct cagctctcag caacatggtg gctgccctga nagaaggggg 4140
ctttctgctc ctgcacacac tgctccgggg gcacccccctc ggggacatcg tggccttcct 4200
cacctccact gagccgcagt atggccaggg catcctgagc caggacgcgt gggagagcct 4260
cttctccagg gtgtcgctgc gcctggtggg cctgaagaag tccttctacg gctccacgct 4320
cttcctgtgc cgccggccca ccccgcagga cagccccatc ttcctgccgg tggacgatac 4380
cagcttccgc tgggtggagt ctctgaaggg catcctggct gacgaagact ctttcccggc 4440
ctgtgtggct gaaggccatc aactgttcca cctcgggcgt ggtgggcttg gtgaactgtc 4500
tccgccgaga gcccggcgga acgctccggt gtgtgctgct ctccaacctc agcagcacct 4560

cccacgtccc ggaggtggac ccgggctccg cagaactgca gaaggtgttg cagggagacc 4620
tggtgatgaa cgtctaccgc gacggggcct ggggggcttt ccgccacttc ctgctggagg 4680
aggacaagcc tgaggagccg acggcacatg cctttgtgag caccctcacc cgggggggacc 4740
tgtccctcca tccgctgggt ctgctcctcg ctgcgccatg cccagcccac ctgccctggc 4800
gcccagctct gcacggtcta ctacgcctcc ctcaacttcc gcgacatcat gctggccact 4860
ggcaagctgt cccctgatgc catcccaggg aagtggacct cccaggacag cctgctaggt 4920
atggagttct cgggccgaga cgccagcggc aagcgtgtga tgggactggt gcctgccaag 4980
ggcctggcca cctctgtcct gctgtcaccg gacttcctct gggatgtgcc ttccaactgg 5040
acgctggagg aggcggcctc ggtgcctgtc gtctacagca cggcctacta cgcgctggtg 5100
gtgcgtgggc gggtgcnccc cggggagacg ctgctcatcc actcgggctc gggcggcgtg 5160
ggccaggccg ccatcgccat cgccctcagt ctgggctgcc gcgtcttcac caccgtgggg 5220
tcggctgaga agcgggcgta cctccaggcc aggttccccc agctcgacag caccagcttc 5280
gccaactccc gggacacatc cttcgagcag catgtgctgt ggcacacggg cgggaagggc 5340
gttgacctgg tcttgaactc cttggcggaa gagaagctgc aggccagcgt gaggtgcttg 5400
gctacgcacg gtcgcttcct ggaaattggc aaattcgacc tttctcagaa ccacccgctc 5460
ggcatggcta tcttcctgaa gaacgtgaca ttccacgggg tcctactgga tgcgttcttc 5520
aacgagagca gtgctgactg gcgggaggtg tnggcgcttg tgcaggccgg catccgggat 5580
ggggtggtac ggcccctcaa gtgcacggtg ttccatgggg cccaggtgga ggacgccttc 5640
cgctacatgg cccaagggaa gcacattggc aaagtcgtcg tgcaggtgct tgcggaggag 5700
ccggaggcag tggctgaagg gggccaaacc caagctgatg tcggccatct ccaagacctt 5760
ctgcccggcc cacaagagct acatcatcgc tggtggtctg ggtggcttcg gcctggagtt 5820
ggcgcagtgg ctgatacagc gtggggtgca gaagctcgtg ttgacttctc gctccgggat 5880
ccggacaggc taccaggcca agcaggtccg ccggtggagg cgccagggcg tacaggtgca 5940
ggtgtccacc agcaacatca gctcactgga gggggcccgg ggcctcattg ccgaggcggc 6000
gcagcttgag gcccgtgggc ggcgtcttca acctggccgt ggtcttgaga gatggcttgc 6060
tggagaacca gaccccagag ttcttccagg acgtctgcaa gcccaagtac agcggcaccc 6120
tgaacctgga cagggtgacc cgagggcgtg ccctgagctg gactactttg tggtcttctc 6180
ctctgtgagc tgcgggcgtg gcaatgcggg acagagcaac tacggctttg ccaatttccg 6240
ccatggagcg tatctgtgag aaacgccggc acgaaggcct cccaggcctg gccgtgcagt 6300
ggggcgccat cggcgacgtg ggcattttgg tggagacgat gagcaccaac gacacgatcg 6360
tcagtggcac gctgccccag cgcatggcgt cctgcctgga ggtgctggac ctcttcctga 6420
accagcccca catggtcctg agcagctttg tgctggctga gaaggctgcg gcctataggg 6480
acagggacag ccagcgggac ctggtggagg ccgtggcaca catcctgggc atccgcgact 6540
tggctgctgt caacctggac agctcactgg cggacctggg cctggactcg ctcatgagcg 6600
tggaggtgcg ccagacgctg gagcgtgagc tcaacctggt gctgtccgtg cgcgaggtgc 6660
ggcaactcac gctccggaaa ctgcaggagc tgtcctcaaa ggcggatgag gccagcgagc 6720
tgggcatgcc ccacgcccaa ggaggatggt ctggcccagc agcagactca gctgaacctg 6780
cgctccctgc tggtgaaccc ggagggcccc accctgatgc ggctcaactg ccgtgcagag 6840
ctcggagcgg cccctgttcc tggtgcaccc aattcgaggg ctccaccacc gtgttccaca 6900
gcctggcctc ccggctcagc atccccacct atggcctgca gtgcacccga gctgcgcccc 6960
ttgacagcat ccacagcctg gctgcctact acatcgactg catcaggcag gtgcagcccg 7020
agggccccta ccgcgtggcc ggctactcct acggggcctg cgtggccttt gaaatgtgct 7080
cccagctgca ggcccagcag agcccagccc ccacccacaa cagcctcttc ctgttcgacg 7140
gctcgcccac ctacgtactg gcctacaccc agagctaccg ggcaaagctg accccaggct 7200
gtgaggctga ggctgagacg gaggccatat gcttcttcgt gcagcagttc acggacatgg 7260
agcacaacag ggtgctggag gcgctgctgc cgctgaaggg cctagaggag cgtgtggcag 7320
ccgccgtgga cctgatcatc aagagccacc agggcctgga ccgccaggag ctgagctttg 7380
cggcccggtc cttctactac aagctgcgtg ccgctgagca gtacacaccc aaggccaagt 7440

accatggcaa cgtgatgcta ctgcgcgcca agacgggtgg cgcctacggc gaggacctgg 7500
gcgcggacta caacctctcc caggtatgcg acgggaaagt atccgtccac gtcatcgagg 7560
gtgaccaccg cacgctgctg gagggcagcg gcctggagtc catcatcagc atcatccaca 7620
gctccctggc tgagccacgc gtgagcgtgc gggagggcta ggcccgtgcc cccgcctgcc 7680
accggaggtc actccaccat ccccacccca tcccacccca cccccgccat gcaacgggat 7740
tgaagggtcc tgccggtggg accctgtccg gcccagtgcc actgcccccc gaggctagct 7800
agacgtaggt gttaggcatg tcccacccac ccgccgcctc ccacggcacc tcggggacac 7860
cagagctgcc gacttggaga ctcctggtct gtgaagagcc ggtggtgccc gtgcccgcag 7920
gaactggggc tgggcctcgt gcgcccgtgg ggtctgcgct tggtctttct gtgcttggat 7980
ttgcatattt attgcattgc tggtagagac ccccaggcct gtccaccctg ccaagactcc 8040
tcaggcagcg tgtgggtccc gcactctgcc cccatttccc cgatgtcccc tgcgggcgcg 8100
ggcagccacc caagcctgct ggctgcggcc ccctctcggc caggcattgg ctcagcccgc 8160
tgagtggggg gtcgtgggcc agtccccgag gactgggccc ctgcacaggc acacagggcc 8220
cggccacacc cagcggcccc ccgcacagcc acccgtgggg tgctgccctt atgcccggcg 8280
ccgggcacca actccatgtt tggtgtttgt ctgtgtttgt ttttcaagaa atgattcaaa 8340
ttgctgcttg gattttgaaa tttactgtaa ctgtcagtgt acacgtctgg accccgtttc 8400
atttttacac caatttggta aaaatgctgc tctcagcctc ccacaattaa accgcatgtg 8460
atctccaaaa 8470

<210> 11
<211> 812
<212> DNA
<213> Homo sapiens

<400> 11
gccgcagcca atcagcgcgc gtgcccgggc ccctgcgtct cttgcgtcaa gacggccgtg 60
ctgagcgaat gcaggcgact tgcgagctgg gagcgattta aaacgctttg gattcccccg 120
gcctgggtgg ggagagcgag ctgggtgccc cctagattcc ccgcccccgc acctcatgag 180
ccgaccctcg gctccatgga gcccggcaat tatgccacct tggatggagc caaggatatc 240
gaaggcttgc tgggagcggg agggggggcgg aatctggtcg cccactcccc tctgaccagc 300
cacccagcgg cgcctacgct gatgcctgct gtcaactatg ccccccttgga tctgccaggc 360
tcggcggagc gccaaagcaa tgccacccat gccctggggt gccccagggg acgtccccag 420
ctcccgtgcc ttatggttac tttggaggcg ggtactactc ctgccgagtg tcccggagct 480
cgctgaaacc ctgtgcccag gcagccaccc tggccgcgta ccccgcggag actcccacgg 540
ccggggaaga gtaccccagc cgccccactg agtttgcctt ctatccggga tatccgggaa 600
cctaccagcc tatggccagt tacctggacg tgtctgtggt gcagactctg ggtgctcctg 660
gagaaccgcg acatgactcc ctgttgcctg tggacagtta ccagtcttgg gctctcgctg 720
gtggctggaa cagccagatg tgttgccagg gagaacagaa cccaccaggt ccctttgga 780
aggcagcatt tgcagactcc agcgggcagc ac 812

<210> 12
<211> 2385
<212> DNA
<213> Homo sapiens

<400> 12
ataagctggg gtaaagtatt ttcgcagttt ctgcctttag gattttatta gcttctctcc 60
cccaggccgc agccaatcag cgcgcgtgcc cgggcccctg cgtctcttgc gtcaagacgg 120

ccgtgctgag cgaatgcagg cgacttgcga gctgggagcg atttaaaacg ctttggattc 180
ccccggcctg ggtggggaga gcgagctggg tgccccctag attccccgcc cccgcacctc 240
atgagccgac cctcggctcc atggagcccg gcaattatgc caccttggat ggagccaagg 300
atatcgaagg cttgctggga gcgggagggg ggcggaatct ggtcgcccac tcccctctga 360
ccagccaccc agcggcgcct acgctgatgc ctgctgtcaa ctatgccccc ttggatctgc 420
caggctcggc ggagccgcca aagcaatgcc acccatgccc tggggtgccc caggggacgt 480
ccccagctcc cgtgccttat ggttactttg gaggcgggta ctactcctgc cgagtgtccc 540
ggagctcgct gaaaccctgt gcccaggcag ccaccctggc cgcgtacccc gcggagactc 600
ccacggccgg ggaagagtac cccagccgcc ccactgagtt tgccttctat ccgggatatc 660
cgggaaccta ccagcctatg gccagttacc tggacgtgtc tgtggtgcag actctgggtg 720
ctcctggaga accgcgacat gactccctgt tgcctgtgga cagttaccag tcttgggctc 780
tcgctggtgg ctggaacagc cagatgtgtt gccagggaga acagaaccca ccaggtccct 840
tttggaaggc agcatttgca gactccagcg ggcagcaccc tcctgacgcc tgcgcctttc 900
gtcgcggccg caagaaacgc attccgtaca gcaaggggca gttgcgggag ctggagcggg 960
agtatgcggc taacaagttc atcaccaagg acaagaggcg caagatctcg gcagccacca 1020
gcctctcgga gcgccagatt accatctggt ttcagaaccg ccgggtcaaa gagaagaagg 1080
ttctcgccaa ggtgaagaac agcgctaccc cttaagagat ctccttgcct gggtgggagg 1140
agcgaaagtg ggggtgtcct ggggagacca ggaacctgcc aagcccaggc tggggccaag 1200
gactctgctg agaggcccct agagacaaca cccttcccag gccactggct gctggactgt 1260
tcctcaggag cggcctgggt acccagtatg tgcagggaga cggaacccca tgtgacagcc 1320
cactccacca gggttcccaa agaacctggc ccagtcataa tcattcatcc tgacagtggc 1380
aataatcacg ataaccagta ctagctgcca tgatcgttag cctcatattt tctatctaga 1440
gctctgtaga gcactttaga aaccgctttc atgaattgag ctaattatga ataaatttgg 1500
aaggcgatcc ctttgcaggg aagctttctc tcagaccccc ttccattaca cctctcaccc 1560
tggtaacagc aggaagactg aggagagggg aacgggcaga ttcgttgtgt ggctgtgatg 1620
tccgtttagc atttttctca gctgacagct gggtaggtgg acaattgtag aggctgtctc 1680
ttcctccctc cttgtccacc ccatagggtg tacccactgg tcttggaagc acccatcctt 1740
aatacgatga tttttctgtc gtgtgaaaat gaagccagca ggctgcccct agtcagtcct 1800
tccttccaga gaaaaagaga tttgagaaag tgcctgggta attcaccatt aatttcctcc 1860
cccaaactct ctgagtcttc ccttaatatt tctggtggtt ctgaccaaag caggtcatgg 1920
tttgttgagc atttgggatc ccagtgaagt agatgtttgt agccttgcat acttagccct 1980
tcccaggcac aaacggagtg gcagagtggt gccaaccctg ttttcccagt ccacgtagac 2040
agattcacgt gcggaattct ggaagctgga gacagacggg ctctttgcag agccgggact 2100
ctgagaggga catgagggcc tctgcctctg tgttcattct ctgatgtcct gtacctgggc 2160
tcagtgcccg gtgggactca tctcctggcc gcgcagcaaa gccagcgggt tcgtgctggt 2220
ccttcctgca ccttaggctg ggggtggggg gcctgccggc gcattctcca cgattgagcg 2280
cacaggcctg aagtctggac aacccgcaga accgaagctc cgagcagcgg gtcggtggcg 2340
agtagtgggg tcggtggcga gcagttggtg gtgggccgcg gccgc 2385

<210> 13
<211> 221
<212> DNA
<213> Homo sapiens

<400> 13
dsdnrstatc tttctgtgtg gtgcagccct gttggcagtg ggcatctggg tgtcaatcga 60
tggggcatcc tttctgaaga tcttcgggcc actgtcgtcc agtgccatgc agtttgtcaa 120
cgtgggctac ttcctcatcg cagccggcgt tgtggtcttt gctcttggtt tcctgggctg 180

ctatggtgct aagactgaga gcaagtgtgc cctcgtgacg t 221

<210> 14
<211> 1533
<212> DNA
<213> Homo sapiens

<400> 14
gggcacgcag acattctggg aagccacttg ccccacccct gggctgcttc ttcttgagat 60
caggaggggc gttgcccagg gctggtgttg ccaggtggag gcctgctgag gcagtggttg 120
tggggatcgg tctccaggca gcaggggggca gcagggtcaa ggagaggcta actggccacg 180
ggtggggcca gcaggcgggc agaaggaggc tttaaagcgc ctaccctgcc tgcaggtgag 240
cagtggtgtg tgagagccag gccgtccctc tgcctgccca ctcagtggca acacccggga 300
gctgttttgt cctttgtgga gcctcagcag ttccctgctt tcagaactca ctgccaagag 360
ccctgaacag gagccaccat ggcagtgctt cagcttcatt aagaccatga tgatcctctt 420
caatttgctc atcttttctgt gtggtgcagc cctgttggca gtgggcatct gggtgtcaat 480
cgatggggca tcctttctga agatcttcgg gccactgtcg tccagtgcca tgcagtttgt 540
caacgtgggc tacttcctca tcgcagccgg cgttgtggtc tttgctcttg gtttcctggg 600
ctgctatggt gctaagactg agagcaagtg tgccctcgtg acgttcttct tcatcctcct 660
cctcatcttc attgctgagg ttgcagctgc tgtggtcgcc ttggtgtaca ccacaatggc 720
tgagcacttc ctgacgttgc tggtagtgcc tgccatcaag aaagattatg gttcccagga 780
agacttcact caagtgtgga acaccaccat gaaagggctc aagtgctgtg gcttcaccaa 840
ctatacggat tttgaggact caccctactt caaagagaac agtgcctttc ccccattctg 900
ttgcaatgac aacgtcacca acacagccaa tgaaacctgc accaagcaaa aggctcacga 960
ccaaaaagta gagggttgct tcaatcagct tttgtatgac atccgaacta atgcagtcac 1020
cgtgggtggt gtggcagctg gaattggggg cctcgagctg gctgccatga ttgtgtccat 1080
gtatctgtac tgcaatctac aataagtcca cttctgcctc tgccactact gctgccacat 1140
gggaactgtg aagaggcacc ctggcaagca gcagtgattg ggggagggga caggatctaa 1200
caatgtcact tgggccagaa tggacctgcc ctttctgctc cagacttggg gctagatagg 1260
gaccactcct tttaggcgat gcctgacttt ccttccattg gtgggtggat gggtgggggg 1320
cattccagag cctctaaggt agccagttct gttgcccatt cccccagtct attaaaccct 1380
tgatatgccc cctaggccta gtggtgatcc cagtgctcta ctgggggatg agagaaaggc 1440
attttatagc ctgggcataa gtgaaatcag cagagcctct gggtggatgt gtagaaggca 1500
cttcaaaatg cataaacctg ttacaatgtt gcc 1533

<210> 15
<211> 472
<212> DNA
<213> Homo sapiens

<400> 15
tcagagaaaa ctcaaacttt attgagagaa ttttcaaatt ttcagtcaca ttttcaatgt 60
gacatcagcc atgtgtgtag cttcagcttg tcttcttttt aacttatggc tgcccatctc 120
ctgcttcttt agtcttagca tgcttaggat taggtggagt cttctctttt acatcagagc 180
catctccacg ctcactccga gtcttttcca gatccatttc ctggcaatca ccttctactt 240
tacgttcttc gatcggaggt gttccttctc tctcttgtcc aggttcaata tcctgattgt 300
cagttggtgg ttcctcttgc tgagattcac cgggagccac gaatgcaacc acatcgggag 360
cctcctgacc atctcctctt cctctggatc ttgatctcac tcgtgcactc atcgctgcaa 420

ctagaagatc gtgaactgaa gaacttgagt cagcagagag cctggcgaag aa 472

<210> 16
<211> 478
<212> DNA
<213> Homo sapiens

<400> 16
cttcattctt cgccaggctc tctgctgact caagttcttc agttcacgat cttctagttg 60
cagcgatgag tgcacgagtg agatcaagat ccagaggaag aggagatggt caggaggctc 120
ccgatgtggt tgcattcgtg gctcccggtg aatctcagca agaggaacca ccaactgaca 180
atcaggatat tgaacctgga caagagagag aaggaacacc tccgatcgaa gaacgtaaag 240
tagaaggtga ttgccaggaa atggatctgg aaaagactcg gagtgagcgt ggagatggct 300
ctgatgtaaa agagaagact ccacctaatc ctaagcatgc taagactaaa gaagcaggag 360
atgggcagcc ataagttaaa aagaagacaa gctgaagcta cacacatggc tgatgtcaca 420
ttgaaaatgt gactgaaaat ttgaaaattc tctcaataaa gtttgagttt tctctgaa 478

<210> 17
<211> 198
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (191)

<400> 17
cccgctgtac caccccagca tgttctgcgc cggcggaggg caagaccaga aggactcctg 60
caacggtgac tctggggggc ccctgatctg caacgggtac ttgcagggcc ttgtgtcttt 120
cggaaaagcc ccgtgtggcc aagttggcgt gccaggtgtc tacaccaacc tctgcaaatt 180
cactgagtgg nattaagg 198

<210> 18
<211> 465
<212> DNA
<213> Homo sapiens

<400> 18
tggagatgga gtatgtattt attttacaaa aataaatcac catcttcgga ccatttgtag 60
actggaacat ttcgagcaat gagtgcgcca cacggacgag tgccctggtg actccctgat 120
gttcgcgtca cccccagggc caccttggcg cccgcatgag cctcgcttcc cactcccggc 180
ctccaactcc cttccctcgc agccgccatt caccttctgc tgtttatttg tctgcagagc 240
gcctggacac cggaaaaggc gattccctga gcgcctggag ttggagacaa ttcctggttc 300
agaatttaaa catctttcta aggtaagcgc tgctccaaaa ctcttcgccg cgtggggact 360
ttgcaccagg ggcggttggg aaggaagttg gccctccacg ggttcctggg caaccgcggc 420
ctgttgaaaa aaggttctgg gtcaaataat ttaacttcgg aggag 465

<210> 19

<211> 204
<212> DNA
<213> Homo sapiens

<400> 19
ggcgggaaca ggcggcgctg gacctgtacc cctacgacgc cgggacggac agcggcttca 60
ccttctcctc ccccaacttc gccaccatcc cgcaggacac ggtgaccgag ataacgtcct 120
cctctcccag ccacccggcc aactccttct actacccgcg gctgaaggcc ctgcctccca 180
tcgccagggt gacactggtg cggc 204

<210> 20
<211> 294
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (287)

<400> 20
gagatttctc ttcaatggct tcctgtgagc tagagtttga aaatatctta aaatcttgag 60
ctagagatgg aagtagcttg gacgattttc attatcatgt aaatcgggtc actcaagggg 120
ccaaccacag ctgggagcca ctgctcaggg gaaggttcat atgggacttt ctactgccca 180
aggttctata caggatataa aggtgcctca cagtatagat ctggtagcaa agtaagaaga 240
aacaaacact gatctctttc tgccaccccc ctgacccttt ggaactnctc tgac 294

<210> 21
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Synthetic

<400> 21
atcagaacaa agaggctgtg tc 22

<210> 22
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Synthetic

<400> 22
atctctaaag ccccaacctt c 21

<210> 23
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Synthetic

<400> 23
tgccgaagag gttcagtgc 19

<210> 24
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Synthetic

<400> 24
gccacagtgg tactgtccag at 22

<210> 25
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Synthetic

<400> 25
gctgcaagtt ctccacattg a 21

<210> 26
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Synthetic

<400> 26
cagccgcagg tgaaacac 18

<210> 27
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Synthetic

<400> 27
tggctttgaa ctcagggtca 20

<210> 28
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Synthetic

<400> 28
cggatgcacc tcgtagacag 20

<210> 29
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Synthetic

<400> 29
cggcaacctg gtagtgagtg 20

<210> 30
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Synthetic

<400> 30
cgcagctcct tgtaaacttc ag 22

<210> 31
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Synthetic

<400> 31
cgggaaccta ccagcctatg 20

<210> 32
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Synthetic

<400> 32
caggcaacag ggagtcatgt 20

<210> 33
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Synthetic

<400> 33
tgggcatctg ggtgtcaa 18

<210> 34
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Synthetic

<400> 34
cggctgcgat gaggaagta 19

<210> 35
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Synthetic

<400> 35
gcccatctcc tgcttcttta gt 22

<210> 36

<211> 21
<212> DNA
<213> Artificial Sequence

Ins A1

<220>
<223> Description of Artificial Sequence:Synthetic

<400> 36
cgtggagatg gctctgatgt a 21